

**Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services**

STATEMENT OF BASIS

Flakeboard America Limited
Louisiana Particleboard Plant
Simsboro, Lincoln Parish, Louisiana
Agency Interest Number: 43959
Activity Number: PER20060003
Proposed Permit Number: 1720-00004-V4

I. APPLICANT

Company:

Flakeboard America Limited
P.O.Box 885
Ruston, Louisiana 71273

Facility:

Flakeboard America Limited
486 Duraflake Rd
Simsboro, Lincoln Parish, Louisiana 71275
UTM Zone 15 522.900 km E 3599.800 km N

II. FACILITY AND CURRENT PERMIT STATUS

The Louisiana Particleboard Plant is a particleboard manufacturing facility. Raw material, including planer shavings, plytrim, and sawdust, is trucked to the site from other wood product facilities, and then stored in piles. After screening, large material is processed as core material in the milling and drying areas for size and moisture reduction, and then blended with resin, wax, and a formaldehyde scavenger. The facility has the potential to produce 300 million square feet of particleboard per year.

The mat is formed by setting a layer of core material in the middle of two layers of face material. It is then trimmed and pressed. Particleboard is cooled, trimmed, sanded, cut to desired sizes, and may be coated. Finished product is warehoused before shipping.

The Louisiana Particleboard Plant is requesting to construct and operate two melamine laminate press lines, for a total annual laminating press capacity of 174.72 MMSF/yr. The laminating operations will be operated independently of the particleboard manufacturing operations.

**Flakeboard America Limited
Flakeboard America Limited - Louisiana Particleboard Plant
Simsboro, Lincoln Parish, Louisiana
Agency Interest Number: 43959**

III. PROPOSED PROJECT/PERMIT INFORMATION

Application

A permit application was submitted on October 9, 2006 requesting a Part 70 operating permit for the Louisiana Particleboard Plant.

Project

The Louisiana Particleboard Plant is requesting to construct and operate two melamine laminate press lines, for a total annual laminating press capacity of 174.72 MMSF/yr. The laminating operations will be operated independently of the particleboard manufacturing operations.

Proposed Permit

Permit 1720-00004-V4 will be the modification of Part 70 operating permit 1720-00004-V3 for the Louisiana Particleboard Plant.

Permitted Air Emissions

Estimated emissions in tons per year are as follows:

Pollutant	Before	After	Change
PM ₁₀	176.75	176.99	+0.24
SO ₂	0.31	0.32	+0.01
NO _x	138.84	140.31	+1.47
CO	134.70	135.93	+1.23
VOC *	191.10	191.67	+0.56

***VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):**

Pollutant	Before	After	Change
Formaldehyde	11.80	12.29	+0.49
Methanol	3.64	3.64	-
Phenol	2.87	2.87	-
Acetaldehyde	0.21	0.21	-
Acrolein	0.09	0.09	-
Benzene	0.05	0.05	-
Total		19.15	

Non-VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

Pollutant	Before	After	Change
Ammonia	0.30	0.30	-

Flakeboard America Limited
Flakeboard America Limited - Louisiana Particulate Plant
Simsboro, Lincoln Parish, Louisiana
Agency Interest Number: 43959

IV REGULATORY ANALYSIS

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

Applicability and Exemptions of Selected Subject Items

ID No.	Requirement	Note
023,032, 045, 064, 065, 066, 067, 068, 075	Compliance Assurance Monitoring (CAM) 40 CFR 64	Does Not Apply. Baghouses are considered inherent process equipment, not control devices under the CAM rule definition.
025, 046, 047, 048	Compliance Assurance Monitoring (CAM) 40 CFR 64	Does Not Apply. Baghouses are considered inherent process equipment, not control devices under the CAM rule definition.
053, 054, 055, 056 Resin Tanks, Catalyst Tanks	Storage of VOC, LAC 33:III.2103	Does Not Apply- Vapor Pressure <1.5psia
059 Scavenger Storage Tank	Comprehensive TAP emission Control Program, LAC 33:III.5109-State Only	MACT is not required for Ammonia (Class III TAP)
060 Catalyst Storage Tank	Storage of VOC, LAC 33:III.2103 NSPS Subpart Kb, 40 CFR 60.110b	Does Not Apply- Vapor Pressure <1.5 psia and Tank Volume < 10,566 gallons
	Comprehensive TAP Emission Control Program, LAC 33:III.5109-State Only	MACT is not required for ammonia (Class III TAP)
Regenerative Catalytic/Thermal Oxidizers No. 1 and No. 2 Administrative CAP (Sources 050 and 063)	Emissions Standards for Sulfur Dioxide, LAC 33:III.1503.C	Exempt. Emissions < 250 TPY

Flakeboard America Limited
Flakeboard America Limited - Louisiana Particleboard Plant
Simsboro, Lincoln Parish, Louisiana
Agency Interest Number: 43959

ID No.	Requirement	Note
071, 072 Thermal Oil Heating Units for Melamine Laminate Press Lines	Emissions Standards for Sulfur Dioxide, LAC 33:III.1503.C	Exempt. Emissions < 250 TPY
073, 074 Melamine Laminate Press Lines	Control of Organic Compounds- Waste Gas Disposal, LAC 33:III.2115	Exempt- Vent gas stream with a concentrations of VOC less than 0.44 psia true partial pressure (30,000 ppm) as per LAC 33:III.2115.H.d

**Flakeboard America Limited
Flakeboard America Limited - Louisiana Particleboard Plant
Simsboro, Lincoln Parish, Louisiana
Agency Interest Number: 43959**

Prevention of Significant Deterioration/Nonattainment Review

The LPB Plant, once a major source for PSD (PSD-LA-621, 1998) is currently a minor source for PSD (i.e., potential emissions of one or more PSD criteria pollutants do not exceed 250 tons per year) as of March 30, 2001, reflected in Permit No. 1720-00004-V1 and is therefore not subject to the provisions of 40 CFR 52.21 (PSD).

MACT Requirements

This facility is a major source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51. The thermal oxidizers are MACT for TAP emissions from the dryers, steam vessel, press, and the board cooler. Melamine resins or a combination of melamine resins and/or formaldehyde scavenger urea, or a combination of ultra low mole ratio resins during the blending and pressing operations is MACT for the baghouses. Resins with < 0.1 wt% of free formaldehyde and urea as a formaldehyde scavenger or use of a combination of ultra low mole ratio resins as a formaldehyde scavenger is MACT for the resin tanks and catalyst tanks.

LPB is proposing the use of a laminate material with HAPs content with <0.1 wt% for carcinogen and/or <1 wt% for non-carcinogens for MACT. LPB will demonstrate compliance without a control device by using the compliant material option. To demonstrate initial compliance using the compliant material option, the facility must use coatings with an organic HAP content below the applicable emission limits. In addition, the facility must use thinners or cleaning materials that contains no organic HAP.

Air Quality Analysis

The Louisiana Particleboard Plant is located in Lincoln Parish, Louisiana, which is classified as attainment for all criteria pollutants. The LPB Plant is in compliance with the state requirements of the State Implementation Plan (SIP).

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

**Flakeboard America Limited
Flakeboard America Limited - Louisiana Particleboard Plant
Simsboro, Lincoln Parish, Louisiana
Agency Interest Number: 43959**

IV. PERIODIC MONITORING

40 CFR 64 – Compliance Assurance Monitoring is applicable to the Regenerative Catalytic/Thermal Oxidizers (RCO/RTOs). The facility monitors the operation of the RCO/RTOs to demonstrate compliance with the minimum destruction rate efficiency of 90% for the captured VOC emissions. Temperature is continuously monitored by a parametric monitoring system. Every 15 minutes, the parameters are recorded, and these 15-minute recordings are averaged every 3 hours. Each 3-hour block average is automatically compared to the compliance parameter thresholds (a minimum average combustion chamber temperature of 804 degrees Fahrenheit). The 3-hour block average must contain at least 75% of the required recorded readings that are based on valid data. The facility also monitors the pressure differential across the RCO beds, which is the difference in static pressure at the inlet and outlet of the unit, continuously by the parametric monitoring system. Monitoring of the pressure differential in the RCO helps determine if the air passages in the ceramic media beds are plugging. A bakeout and/or washout will be conducted if the pressure differential data trend indicates unacceptable blockage.

40 CFR 64- Compliance Assurance Monitoring is not applicable to the baghouses because they are considered inherent process equipment. They are necessary for the proper functioning of the process. Without the baghouses, the facility cannot effectively transfer raw materials and recovered materials. Additionally, the baghouses are not operated at an efficiency higher than achieved during normal process operations to comply with an emission standard.

VII. GLOSSARY

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide (H₂S) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C (“Prevention of Significant Deterioration of Air Quality”) and D (“Nonattainment New Source Review”).

Nitrogen Oxides (NO_x) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane (CH₄), Ethane (C₂H₆), Carbon Disulfide (CS₂)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥10 tons per year of any toxic air pollutant; ≥25 tons of total toxic air pollutants; and ≥100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM₁₀ – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO₂) – An oxide of sulfur.

Sulfuric Acid (H₂SO₄) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.